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NOV 10 1965

USDA--Forest Service
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FIR
LGL-3-11
1511 ✓

The Record 5230

David McComb Nov. 8, 1965

Evaluation (Douglas-fir Tussock Moth)

The week of October 25 was spent in southwest Oregon doing an evaluation of the Douglas-fir tussock moth on the Fremont National Forest, Bureau of Land Management lands, and adjacent areas.

On Tuesday morning, I contacted Ken Drahos in the Supervisor's Office of the Fremont National Forest in Lakeview. Ken made arrangements for a plane in which to make an aerial reconnaissance of the suspected infested area. Accompanied by Everett Schultz, I flew for one hour on the Drews Valley Ranger District east of Horseshoe Meadow and over the Modoc National Forest immediately south of the area. The area on the Modoc is the infestation reported by Norman Johnson, Entomologist for the Weyerhaeuser Company.

Very light tussock moth feeding was observed in the tips of firs scattered throughout T.40S., R.18E. on the Drews District. There are many new roads in this area that were not on our maps, so we were unable to locate the defoliation accurately but it appears to be in Sections 22, 23, 26, and 27.

After viewing the Fremont area we flew across the California State line about two miles and looked at the Modoc outbreak. Feeding in this area was quite heavy and readily visible from the plane. It covered an estimated 800 to 1,000 acres of varied size open stand fir with much of the stand one-fourth to one-third defoliated. This outbreak is located in Sections 26, 27, 34, and 35 of R.12E., T.48N.

After landing at Lakeview, we proceeded in a Fremont National Forest carryall to the area east of Horseshoe Meadow and examined the outbreak. Feeding was very light on the old foliage. Feeding on current year's growth was moderate on some trees and the top two or three feet of a few trees were completely defoliated. Cocoons and old egg masses were common but we only collected eight new egg masses. The larval population appears to have collapsed shortly after the new growth was consumed. Indications in the area visited are that the moth population is dropping rapidly. This appears to be a short life for a tussock moth outbreak and I believe we should keep an eye on the area. I also plan to get Dr. Thompson to look at the area when we go back moth egg collecting later in November.

Wednesday morning I drove by auto to the infested area on the Modoc. To get to this area from Lakeview, you drive down the west side of Goose Lake on the "West Side" blacktop road to the California State line. Pave-

ment ends at the State line but follow the road 4.6 miles south to Forest Service road 48N04. Turn right on this road and follow it along Corral Creek for 7-1/2 miles to Section line marker 27-34 of R.12E., T.48N. This marker is just inside the east edge of the infested area.

In the infested area along the road I collected new egg masses in individual containers for Dr. Thompson. One egg mass was collected from each of six trees at eight plots at 1/10-mile intervals along the road. In addition, 200 new egg masses were collected in one hour for virus rearing. This area, while not the best I have seen, could be a supply source for the groups looking for new egg masses.

Defoliation has been heavy and while I did not see any trees completely defoliated, many were half to two-thirds defoliated and will probably die. I did not make an egg ratio survey as the area is out of our Region, but I would guess there are eight new masses for each old. If tests by Dr. Thompson show a low virus incidence in the area, I believe it would be an ideal location for the virus test plot. Since the infested area is within two miles of the Fremont National Forest we should keep an eye on our adjacent timber.

From the Modoc I drove to Malin, Oregon on the California State line, about 30 miles southeast of Klamath Falls. Our aerial surveys had shown a defoliator at work on fir at Long Lake Reservoir, a few miles northeast of Malin. While in Malin, I met George Amrheim of the Bureau of Land Management and requested information on how to get into the area. He was kind enough to lead me up to the area over a very poor road. He also informed me that part of the area may be on Bureau of Land Management land and the rest is probably owned by the Loveness Lumber Company.

In this area, just east of the Reservoir, there was considerable feeding on the new fir growth and a little on the pines. There was no recent top feeding and little feeding on old growth. In some of the area, I could not find any old or new egg masses and only a few cocoons, while in other areas I found a few old egg masses. I did not find any new egg masses any where. I collected about a dozen unemerged cocoons in individual containers for Dr. Thompson to check for virus. In two areas where I could not find any cocoons I clipped bags of foliage in case he would be interested in checking for virus on the foliage.

As nearly as I can tell, the moth population in this area has collapsed after considerable feeding for the small number of old egg masses present.

Anyone wishing to look at this area should travel by pickup or jeep and don't try to go in or out by way of the Harpold Reservoir road. I know!

On the return trip to Portland, I stopped off at Corvallis and gave Dr. Thompson a rundown on my observations and left the egg and foliage collections. We plan to return to the Fremont and Modoc areas the week of November 15 to collect eggs and to see if the Modoc area would meet the requirements for a virus study area.

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cc: Fremont NF
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PNW ✓
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